



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

American Continent, published in the current number of the "Proceedings of the Academy of Natural Sciences of Philadelphia," I give what I believe most unprejudiced critics will consider good reasons for doubting the full accuracy of Mr. Dall's measurements of Mount St. Elias (and Mount Fairweather). The reasons for this belief were republished by the editor of *Science* in the issue of that journal of Nov. 7, and need not be restated; but I may be permitted to add that they were formulated two months before the results obtained by Russell and Kerr were made known, which, unfortunately (for St. Elias), only too clearly prove the justice of my doubt, and fortify my statement that the true position of St. Elias is probably "after, and not before, the Peak of Orizaba."

Dr. Dall seeks to throw discredit on my analysis of his measurements by unfavorably criticising my work in Mexico, but I fail to see the relevancy of the citation. He accuses me of being "no geodesist," which I am pleased to admit; but then I am manifestly not far removed from the company of the distinguished naturalist of Washington, since he also sees fit to confess that he makes "no pretence to the character of a geodetic expert." When, however, Dr. Dall wishes to instruct me in the value and deficiencies of an aneroid barometer, I may perhaps be pardoned for looking to other sources for my information; and I would recommend to my learned friend that he acquaint himself more closely with the analyses of the workings of this instrument made recently by German specialists. I append herewith the results of various measurements made in Mexico, which speak for themselves.

Peak of Orizaba.

	Feet.
Humboldt (trigonometric).....	17,375
Ferrer (1796, trigonometric).....	17,879
Plowes, Rodrigues, and Vigil (1877, trigonometric).....	17,664
Von Müller (trigonometric).....	18,112
Ratzel (barometric).....	18,069
Kaska (mercurial barometric).....	18,045
Kaska (mercurial barometric, more recent).....	18,200
Dolgnon (?).....	18,332
Heilprin.....	18,205

Popocatepetl.

	Feet.
Humboldt (trigonometric, corrected to Mexican R. R. levelling).....	17,590
Glennie (barometric).....	17,884
Sonntag (trigonometric, with correction to R. R. levelling).....	17,660
Heilprin.....	17,523

Ixtaccihuatl.

	Feet.
Humboldt (trigonometric, corrected to R. R. levelling).....	15,702
Sonntag (trigonometric, corrected to R. R. levelling).....	16,951
Heilprin.....	16,960

Nevado de Toluca.

	Feet.
Humboldt (barometric, corrected to R. R. levelling).....	15,038
Height given by Garcia Cubas.....	15,020
Heilprin.....	14,954

The correspondences and divergences may be considered "merely accidental," if it so pleases the critic; but let us contrast with these Mr. Dall's "observations of a higher class" (as compared with previous measurements):—

Mount St. Elias.

	Feet.
From 69 miles.....	19,464
From 127 ".....	18,350
From 132 ".....	19,956
From 167 ".....	18,033
Russell and Kerr (1890, as reported in the daily papers) less than.....	15,000
La Pérouse (1786).....	13,000

Possibly the critic will consider these "trigonometrical" results as being also "merely accidental." Mr. Dall wrongly interprets me when he accuses me of broadly stating that the system of "extracting averages" is "delusive." What I object to is the "delusive system of extracting averages." I should perhaps have underscored the first word; but the context, it appears to me, ought to have made my meaning clear. When four measurements of a mountain (Mount Fairweather) give individual results of 15,085, 15,247, 15,447, and 16,009 feet, I fail to see how by any

correct system of extracting averages we can obtain "unanimity" in the general result. It is the making of this unanimity which is a delusion to me.

The scientific world will receive with interest the publication of the results of the recent expedition to Mount St. Elias, and I agree with Dr. Dall that it is best to await the official publication before building too high on preliminary newspaper statements.

ANGELO HEILPRIN.

Academy of Natural Sciences, Philadelphia, Nov. 15.

Strawberries.

It needs little proof to show that a long-season strawberry is more desirable than one that yields all its fruit within a week. The great bearers are always among those with a long bearing season. A plant, like a person, can do more work in two weeks than in one. What we desire in a good variety is not only a large quantity of fruit, but also a regular supply during a reasonably long fruiting period. As to pollen-production, I do not think that this is quite as heavy a tax upon the vital energies of strawberry-plants as the Ohio Experiment Station tries to make us believe. Undoubtedly it requires some effort, but there is nothing in analogy to show that the process is an exhaustive one. Nature is quite lavish in the production of pollen. While it is true that Haverland, Warfield, and Crescent—all imperfect-flowering varieties—may be safely put down as our most prolific sorts, this fact may be due to mere accident as much as to "division of labor." I have frequently seen the perfect-flowering Sharpless, Pearl, Capt. Jack, even the Wilson, and others, out-yield by a great deal the best on the list of imperfect-flowering (pistillate) varieties. The Long John, a perfect-flowering sort which originated here twenty or more years ago, has for the past two years equalled, or rather out-yielded, even the far-famed and truly wonderful Haverland.

T. GREINER.

La Salle, N.Y., Nov. 12.

Structure of the Plesiosaurian Skull.

IN his recently published "Manual of Paleontology" (p. 1067) Lydekker makes the statement, in his definition of the *Lynaptosaurian* branch, that there are "no ossifications in the sclerotic of the eye," and repeats it in his yet more recent "Catalogue of Fossil Reptilia." Upon this authority, I stated in my recent letter to *Science* that sclerotic plates had not been previously described for this branch, including the *Chelonia* and *Sauropterygia*. This is not correct, as Dr. Baur kindly informs me. He says, "Sclerotic plates are present in the *Testudinata*, as mentioned by Huxley and Hoffmann. I have found them in *Pleurodira*, *Cryptodira*, and *Trionycha*."

I do not wish to say that this character, and certain other ones, such as the co-ossification of the jaws, absence of parietal foramen, etc., are of high classificatory value, but rather that their discovery will require a revision of definitions hitherto given.

S. W. WILLISTON.

Lawrence, Kan., Nov. 12.

AMONG THE PUBLISHERS.

THE issue of *Garden and Forest* for Nov. 12 opens with an article on the use of the axe in plantations of ornamental trees. This is followed by an illustrated account of some insect enemies of fruit trees, by Professor Smith, entomologist of the New Jersey Experiment Station. *Celastrus articulata*, a Japanese relative of our climbing bitter-sweet, is described by Professor Sargent, and an excellent figure of the plant accompanies the description. Mrs. Treat writes instructively of evergreens in the pine barrens of New Jersey; and articles on chrysanthemums, asters, and other late-flowering plants, help to make the number seasonable and attractive to every lover of a garden.

— The first edition of "Scientific Lectures," by Sir John Lubbock (London and New York, Macmillan), appeared in 1879. The second edition, now before us, is, so far as we are able to judge, but a reprint of the former. The subjects treated are flowers and insects, plants and insects, the habits of ants, and an introduction

to the study of prehistoric archæology. The volume also contains an address to the Wiltshire Archæological and Natural History Society, and an inaugural address to the Institute of Bankers. Although more than ten years have passed since the first edition was published, the subjects have lost none of their freshness, nor has the manner in which they are handled lost any of its charm or interest.

— *The Chautauquan* for December includes the following articles: "The Intellectual Development of the English People," by Edward A. Freeman; "The English Constitution," III., by Woodrow Wilson, Ph.D.; "How the Saxon Lived," Part III., by R. S. Dix; "The Tenure of Land in England," Part III., by D. McG. Means; "An English Scholar of the Middle Ages," by Eugene Lawrence; and "Studies in Astronomy," II., by Garrett P. Serviss.

— "A Chart of English Literature," edited by George Edwin Maclean, Ph.D., has appeared from the press of Ginn & Co. It is an outgrowth of Professor Maclean's experience in the class-room with a number of classes in the history of English literature, and is, in fact as in name, only a chart, making no pretension to the greater measure of completeness pertaining to the purposes of tables of literature. It covers the whole field, nevertheless, is practical, and will prove useful to students of literature.

— *The Nineteenth Century* for November (New York, Leonard Scott Publication Company) maintains the reputation of this review as the leading English periodical. It opens with a paper by Mr. Gladstone, entitled "Mr. Carnegie's Gospel of Wealth: a Review and a Recommendation." In this article Mr. Gladstone reviews Mr. Carnegie's theories on the use of wealth, and urges the re-establishment of Lord Carlisle's Universal Beneficent Society,—an organization started some twenty-five years ago. In an article on "The Aryan Question and Prehistoric Man," Professor Huxley examines the question of the antiquity of man from a biological standpoint, and finds traces of human existence at a very early time. Prince Krapotkin continues his studies in mutual aid among animals, and brings together many curious illustrations of mutual regard among the lower members of the animal kingdom. Henry Wallis writes on the destruction of Egyptian monuments, which he justly regards as one of the disgraces of our time. He gives a faithful picture of the incalculable damage now being done to some of the most interesting relics of a past civilization. The Hon. Emily Lawless begins a series of papers on old Irish chronicles, the first instalments being devoted to telling the story of the life of Gerald Mor (Gerald the Great), one of the most picturesque figures in Irish history. Dr. J. Paul Richter writes on the guilds of the early Italian painters, and presents a novel picture of the training of artists in the middle ages in Italy. Professor F. T. Palgrave of Oxford contributes an essay on the Oxford literary movements of the fifteenth century, tracing the importance of Oxford in the development of English literature. Three writers briefly discuss the question of the private soldier's wrongs, from as many standpoints. Right Rev. Bishop Barry presents a plea for the loyal feeling in the English colonies, in an article on "The Loyalty of the Colonies." R. E. Prothero writes on French boycotting and its cure. The Right Rev. Earl Grey begins a series of brief political articles entitled "In Peril from Parliament."

—An office has been established in the National Department of Agriculture, one function of which is to collate the work of the agricultural experiment stations of the country, and republish such portions as are of greatest immediate importance in a special farmers' bulletin. The second issue of this bulletin, recently published, contains accounts of experiments on the following subjects: "Better Cows for the Dairy,"—a description of an experiment made by the Massachusetts station, in which records have been kept of the feed consumed and milk produced by twelve cows of different breeds, the experiment extending over five years (it is shown, that, if no allowance be made for the value of the manure, the best cow in the test gave a profit of thirty-six dollars, while the poorest one, with her feed, cost thirty-four dollars more than her produce was worth); "Fibrine in Milk,"—an account in

which Dr. Babcock of the Wisconsin station has shown that there is a substance in milk akin to the fibrine or clot of blood, and that this substance plays an important part in butter-making; "Bacteria in Milk, Cream, and Butter,"—the substance of reports of an investigation made on behalf of the Storrs School station of Connecticut, in which it is shown that these minute organisms, which are found everywhere in the atmosphere, are the immediate cause of the souring of milk, and that milk may be handled with much greater economy by understanding the nature of bacteria; "Silos and Silage,"—a digest of experiments made at the stations of Kansas, Ohio, Michigan, Illinois, and New York; "Alfalfa,"—a report giving full directions for the culture of this plant, with its value as a fertilizer and as food for stock. This summary gives an idea of the contents of these bulletins, which are published for free distribution among farmers, and will be sent to any farmer on request. Address Office of Experiment Stations, Department of Agriculture, Washington, D.C.

— *The American Journal of Archæology and of the History of the Fine Arts*, Vol. VI. (1890), will contain among its articles of interest the following: "Hittite Sculptures," and "Oriental Antiquities," by Dr. William Hayes Ward of New York; "Antiquities of Phrygia," by Professor William M. Ramsay of Aberdeen, Scotland; "Terra cottas in American Collections," by Salomon Reinach, Museum of Saint-Germain, France; "Reminiscences of Egypt in Doric Architecture," by Professor Allan Marquand of Princeton; "Three Heads of Zeus, Hades, and Poseidon, of the Hellenistic Period," by Professor Adolph Michaelis of Strassburg; "Excavations and Discoveries made by the American School of Archæology at Anthedon and Thisbe in Boeotia, Greece," by Professor F. B. Tarbell of Harvard University, and Dr. J. C. Rolfe of Columbia College; "Greek Sculptured Crowns and Crown-Inscriptions," and "Distribution of Hellenic Temples," by Dr. George B. Hussey of Princeton; "Norms in Greek Architecture," by Professor Marquand and Dr. Hussey; "The Recently discovered Early Christian Palace under SS. Giovannie Paolo, at Rome," by Padre Germano of the Order of Passionists; "The Lost Mosaics of Rome from the Fourth to the Ninth Century," by Eugene Müntz of the Beaux-Arts, Paris; "Cistercian Monuments as the Earliest Gothic Constructions in Italy," "Roman Artists of the Middle Ages," "Christian Mosaics," and "Tombs of the Popes at Viterbo," by Professor A. L. Frothingham, jun., of Princeton. Being the organ of the Archæological Institute of America, and the medium of direct communication from the American School at Athens, this work has an increasing popularity among general readers as well as specialists.

—In the *Fortnightly Review* for November, issued in this country by the Leonard Scott Publication Company, New York, the new story by Count Leo Tolstoi is brought to a conclusion. An article by Moreton Frewen on "The National Policy of the United States" treats of the recent tariff legislation in this country. The author thinks the McKinley Bill may lose Great Britain Canada, but that it is more likely to cement a Greater Britain not alone of Canada, but also of Australia and South Africa. Sir Lepel Griffin, who published a series of papers on America in the *Fortnightly* a few years ago, writes on "The Burman and his Creed," describing religious life in Burmah and the religious feelings among the natives. Frederick Greenwood, the former editor of the *Pall Mall Gazette*, contributes a careful forecast of the political future of England in an article entitled "The Coming Session: Breakers Ahead." An address delivered to the Chamber of Commerce at Liverpool by H. H. Johnston, on "The Development of Tropical Africa under British Auspices," contains much information as to the possibilities of the Dark Continent and its value to civilized nations. Madame James Darmsteter continues her studies in French medieval life in a paper on "Rural Life in France in the Fourteenth Century," in which she brings together many curious items relating to daily life in the middle ages. A paper by Felix Volkowsky on his life in Russian prisons presents a lifelike picture of existence in Russian prisons by one who spent seven years in solitary confinement and eleven years as an exile in Siberia. This is a thrilling account of actual prison life in Russia, and will doubtless command wide attention. W. H.

Mallock continues his duel with Father Sebastian Bowden on reason and religion in a paper entitled "Reason Alone." Algernon Charles Swinburne contributes a notice of the life and works of the old English poet, Robert Davenport. The number closes with the second instalment of George Meredith's new novel, "One of Our Conquerors."

—One of the most recent additions to the American Book Company's list of schoolbooks is "The Natural Speller and Word Book." The word "natural" in this connection, we presume, relates to an important principle recognized in the higher branches, but too long neglected in the beginnings of school education. In the higher branches this principle is acted upon in showing the intimate relation existing between the various subjects taught, as mathematics, physics, astronomy, chemistry, etc. In this book an effort is made in the same direction by showing the relationship between the words in each lesson. As stated in the preface, "there are a certain number of useful words which the pupil must learn in any event. The question therefore arises whether it is of more benefit to teach him these words abstractly, or to combine them into various exercises which will prove both interesting and instructive." The latter plan has been adopted in this work, and the idea has been well worked out. In addition to the usual methods of calling attention to special letters and combinations by means of bold-faced type, etc., the use of red ink has been tried, and, in our opinion, with unsatisfactory results.

— "Smithsonian Miscellaneous Collections," No. 741, is an "Index to the Literature of Thermodynamics," by Alfred Tuckerman, Ph.D. This is similar to the author's "Index to the Literature of the Spectroscope," published in the thirty-second volume of the same collection for 1888. All of the titles are given in full in the author-index; but in the subject-index, to save useless repetition, only the authors and the places where their works are to be found are given, except in the case of books. Applica-

tions of thermodynamics have been found, and kept, to the number of more than double the titles given, but they were omitted so as not to overload the index with matter of little or no use. No titles, however, have been left out which belong to the applications named in the table of contents. The work has been brought down to the middle of the year 1889.

— "A Woman's Trip to Alaska" is the title of a volume of travels which the Cassell Publishing Company will issue in a few days. The woman who made the trip is Mrs. Septima M. Collis, the wife of Gen. C. H. T. Collis of New York.

—The American publishers of the *Contemporary Review*, the Leonard Scott Publication Company, announce that the November number of that periodical will contain an important note on the personal relations of Stanley and Emin Pacha by Dr. Carl Peters, who gives Emin Pacha himself as the authority for his statements. Josephine Butler will write a graceful tribute to Mrs. Booth, the mother of the Salvation Army, not only describing Mrs. Booth's own part in building up the work of that organization, but pointing out the great good it has accomplished. Arnold White will tell the story of some recent experiments in colonization as gathered from his own observations in South Africa. George Bartrick Baker will contribute a paper on "The Late Crisis on the Stock Exchange," in which he will undertake to point out the causes which have led to the present stringent condition of the money market. Justin McCarthy will review Mr. Lecky's last volumes, the concluding portion of his "History of England in the Eighteenth Century," which are chiefly devoted to the study of the Irish Union. Mrs. Millicent Garrett Fawcett will write on "Infant Marriage in India," and detail the actual life of a Hindoo woman from her cradle. Rev. Dr. Edwin A. Abbott will have a thoughtful and interesting essay on "Illusion in Religion." Sir Thomas H. Farrer will continue his examination into the methods of imperial finance for the last four years. Vernon Lee's Story, "A

POPULAR SCIENCE TEXT-BOOKS

SELECTED FROM THE LIST OF THE

American Book Company,

Adapted to the use of Schools, Academies, Colleges, Private Students and the General Scientific Reader.

ASTRONOMY.

Kiddle's New Elementary Astronomy.

By HENRY KIDDLE, A.M. Cloth, fully illustrated, 284 pp., \$1.08.

A Manual of the Elements of Astronomy, Descriptive and Mathematical, comprising the latest discoveries and theoretic views, with directions for the use of Globes and for studying the Constellations.

Peck's Astronomy and Optics.

By WILLIAM G. PECK, Ph.D., LL.D. \$1.20.

A popular Astronomy for the use of Colleges, Academies, and High Schools, and for the general scientific reader.

Bowen's Astronomy by Observation.

By ELIZA A. BOWEN. New edition just issued. 4to, 90 pages, \$1.00.

An elementary text-book for high schools and academies, based on the most practical and interesting method of studying the subject.

SCIENCE PRIMERS.

Edited by Professors HUXLEY, ROSCOE, and BALFOUR STEWART.

Introductory, - - -	T. H. HUXLEY.	Botany, - - -	J. D. HOOKER.
Chemistry, - - -	H. E. ROSCOE.	Logic, - - -	W. S. JEVONS.
Physics, - - -	BALFOUR STEWART.	Inventional Geometry, - - -	W. G. SPENCER.
Physical Geography, - - -	A. GEIKIE.	Pianoforte, - - -	FRANKLIN TAYLOR.
Geology, - - -	A. GEIKIE.	Political Economy, - - -	W. S. JEVONS.
Physiology and Hygiene, M. FOSTER and R. S. TRACY.		Natural Resources of the United States, J. H. PATTON.	
Astronomy, - - -	J. N. LOCKYER.		

Price, 35 cents each.

The writers of these small treatises have well understood how to be concise without being dull, and will be found extremely lucid in their expositions. Prepared by eminent men, these Primers claim to be not only a valuable addition to educational literature, but the best stepping stones in our language to knowledge in various departments of science.

Besides the above, the list of the AMERICAN BOOK COMPANY embraces many of the most popular and successful text-books in the departments of Science ever published. It includes works on Astronomy, Biology, Botany, Chemistry, Geology, Natural History, Physics and Natural Philosophy, Physiology, Zoology, &c., &c. For Complete Catalogue and Price List address the

AMERICAN BOOK COMPANY,

NEW YORK: 806 and 808 Broadway.

CINCINNATI: 137 Walnut Street.

CHICAGO: 258 and 260 Wabash Avenue.

A SYSTEM OF EASY LETTERING.

By J. H. CROMWELL, Ph.B.

Twenty six different forms of Alphabets. The space to be lettered is divided into squares, and with these as a guide the different letters are drawn and inked. Price, 50 cents, postpaid.

E. & F. N. SPON, 12 Cortlandt Street, New York.

JUST PUBLISHED.

RACES AND PEOPLES.

By DANIEL G. BRINTON, M.D.

"We strongly recommend Dr. Brinton's 'Races and Peoples' to both beginners and scholars. We are not aware of any other recent work on the science of which it treats in the English language."—*Asiatic Quarterly*.

"His book is an excellent one, and we can heartily recommend it as an introductory manual of ethnology."—*The Monist*.

"A useful and really interesting work, which deserves to be widely read and studied both in Europe and America."—*Brighton (Eng.) Herald*.

"This volume is most stimulating. It is written with great clearness, so that anybody can understand, and while in some ways, perforce, superficial, grasps very well the complete field of humanity."—*The New York Times*.

"Dr. Brinton invests his scientific illustrations and measurements with an indescribable charm of narration, so that 'Races and Peoples,' avowedly a record of discovered facts, is in reality a strong stimulant to the imagination."—*Philadelphia Public Ledger*.

Price, postpaid, \$1.75.

N. D. C. HODGES,
47 Lafayette Place, N. Y.

Old and Rare Books.

BACK NUMBERS and complete sets of leading Magazines. Rates low. AM. MAG. EXCHANGE. Scholastic N.Y.

"Worldly Woman," will come to a conclusion; and Irish politics will receive consideration in a paper on "The Irish Land-Purchase Bill," by William O'Connor Morris, and a review of the proposed remedies for Irish distress by Michael Davitt.

—A pamphlet has been published in Washington on the subject of "Manual Training in the Public Schools of the District of Columbia." It is purely descriptive in character, and gives a careful and somewhat minute account of the various exercises that have been adopted at the national capital for imparting the training in question. The exercises here described are exclusively for boys, and embrace many kinds of operations in both wood and metal work, as well as in drawing. They are more difficult than some that we have seen described, and demand for their performance a considerable degree of mechanical skill. The text is illustrated by a large number of diagrams, which show better than description can the real character of the work done; and the pamphlet will doubtless be useful to all who are interested in its subject.

—*Scribner's Magazine* during the coming year will publish, among other matter not hitherto announced, "Papers on Japan," by Sir Edwin Arnold (completing the series to be begun in the December number under the title "Japonica"), illustrated by Robert Blum, who was commissioned by the magazine to visit Japan for the purpose, and co-operate with the author. Another literary and artistic contribution to this subject, also illustrated by Mr. Blum during his residence at Tokio, will be two articles by John H. Wigmore, professor in the Tokio University,—one on the popular aspect, and especially on the general celebration, of the inauguration of the new constitution and political order in Japan; and the other on the new parliament and other bodies which are to carry it into effect. Professor James Bryce, M.P., the well-known English publicist, and author of "The American Commonwealth," will write four articles upon India, embodying

the results of his recent journey and a careful study of the country in its social and political aspects, both in itself and its relations to the British Empire. Henry M. Stanley will make an important contribution on an African topic (entirely distinct from his book), with noteworthy illustrations; several papers will also be published, continuing the general subject of Africa, upon which the magazine has printed during the past year, in Mr. Stanley's only article, and in papers by Thomson, Drummond, Ward, and others, the most important articles that have appeared. In an early number will be printed an article by J. S. Keltie, summarizing, with the aid of the African Exhibition just held in London, the great events in the history of African exploration, with a large number of unique illustrations from objects, portraits, etc., lent by explorers and their representatives. There will also be published in the magazine "Latest Explorations of Dr. Carl Lumholtz" (the explorer, and author of "Among the Cannibals"),—papers giving the first account, and the only one to be published in any periodical, of the expedition upon which he is now engaged in a comparatively unexplored region of northern Mexico, in which, it has long been believed by the best authorities, may be discovered descendants of the primitive cave-dwellers and the foundations of the oldest American civilization; several articles upon Australian topics (including "Glimpses of Australia," by Josiah Royce; an article upon the railways of Australia, which, as examples of successful government control, present many novel features; an article on Kangaroo hunting by Birge Harrison; and others); "Ocean Steamships," a short series of fully illustrated articles (somewhat similar, in point of view and treatment, to the railway articles which excited so wide an interest in the magazine in 1889) upon their management, the life and travel upon them, etc.; and "The Seashore,"—four papers by Professor N. S. Shaler, with very copious and rich illustrations from the collections of photographs and drawings, both of the Atlantic and Pacific coasts, made by the author during the last twenty years.

Dyspepsia

Horsford's Acid Phosphate.

In dyspepsia the stomach fails to assimilate the food. The Acid Phosphate assists the weakened stomach, making the process of digestion natural and easy.

Dr. R. S. McCOMB, Philadelphia, says: "Used it in nervous dyspepsia, with success."

Dr. W. S. LEONARD, Hinsdale, N. H., says:

"The best remedy for dyspepsia that has ever come under my notice."

Dr. T. H. ANDREWS, Jefferson Medical College, Philadelphia, says:

"A wonderful remedy which gave me most gratifying results in the worst forms of dyspepsia."

Descriptive pamphlet free.

Rumford Chemical Works, Providence, R. I.

Beware of Substitutes and Imitations.

CAUTION.—Be sure the word "Horsford's" is printed on the label. All others are spurious. Never sold in bulk.



PRESSED WILD FLOWERS of the Black Hills; natural colors preserved, in Unique Books, with a fine plate of Deadwood. Large stock of Minerals, Vertebrate Fossils and Indian Relics of Dakota. Send for new catalogue. L. W. STILLWELL, Deadwood, So. Dak.

Just Published.

Fact and Theory Papers

I. THE SUPPRESSION OF CONSUMPTION.

By GODFREY W. HAMBLETON, M.D. 12°. 40c.

II. THE SOCIETY AND THE "FAD."

By APPLETON MORGAN, Esq. 12°. 20 cents.

III. PROTOPLASM AND LIFE.

By C. F. COX. 12°. 75 cents.

IV. THE CHEROKEES IN PRE-COLUMBIAN TIMES.

By CYRUS THOMAS. 12°. \$1.

V. THE TORNADO.

By H. A. HAZEN. 12°. \$1.

VI. TIME RELATIONS OF MENTAL PHENOMENA.

By JOSEPH JASTROW. 12°. 50 cents.

To be ready soon.

VII. HOUSEHOLD HYGIENE.

By MARY TAYLOR BISSELL. 12°. 75 cents.

Mailed, postpaid, on receipt of price.

N. D. C. HODGES, 47 Lafayette Place, N. Y.



Children

always

Enjoy It.

SCOTT'S EMULSION

of pure Cod Liver Oil with Hypophosphites of Lime and Soda is almost as palatable as milk.

Children enjoy it rather than otherwise. A MARVELLOUS FLESH PRODUCER It is indeed, and the little lads and lassies who take cold easily, may be fortified against a cough that might prove serious, by taking Scott's Emulsion after their meals during the winter season.

Beware of substitutions and imitations.

OF WHAT USE IS THAT PLANT?

You can find the answer in SMITH'S "DICTIONARY OF ECONOMIC PLANTS."

Sent postpaid on receipt of \$2.80. Publisher's price, \$3.50.

SCIENCE BOOK AGENCY,

47 Lafayette Place, New York.